

Claims

What is claimed is:

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1. A lock washer for use in a catheter connector, comprising:  
a ring defining a periphery of the lock washer; and  
a plurality of tube engagement flanges associated with and extending centrally  
from said ring, each of said tube engagement flanges having a central tip, central tips  
of at least selected ones of said plurality of tube engagement flanges defining a tube  
receptacle for receiving and retaining a tube within said lock washer.
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2. The lock washer of claim 1, wherein each of said tube engagement flanges is  
resilient.
- 15  
3. The lock washer of claim 1, wherein adjacent ones of said tube engagement  
flanges define a compression slot therebetween.
4. The lock washer of claim 1, further comprising a collapsible, web disposed  
between adjacent ones of said tube engagement flanges.
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5. The lock washer of claim 1, wherein said tube engagement flanges are  
flexible towards the center of a plane defined by the periphery of said ring.
- 25  
6. The lock washer of claim 5, wherein upon flexion of said tube engagement  
flanges towards the center of said ring, the diameter of said tube receptacle decreases.
7. The lock washer of claim 5, wherein following the release of a compressive  
load from said lock washer periphery, said tube engagement flanges resiliently flex  
back to a relaxed state.

7 8. The lock washer of claim 5, wherein adjacent ones of said tube engagement flanges define a compression slot therebetween.

5 9. The lock washer of claim 5, further comprising a web disposed between adjacent ones of said tube engagement flanges.

10 10. The lock washer of claim 9, wherein, upon flexion of said adjacent ones of said tube engagement flanges toward said ring, said web collapses upon itself.

11 11. The lock washer of claim 9, wherein, following flexion of said tube engagement flanges, said tube engagement flanges return to a relaxed state and said web re-expands to an original state.

15 12. The lock washer of claim 1, wherein each said central tip comprises a concave arc.

20 13. A lock washer comprising:  
a ring defining a periphery of the lock washer; and  
a plurality of resilient tube engagement flanges associated with said ring and extending therefrom, each of said tube engagement flanges having a relaxed state and an engaged state, and each including a central tip, said central tips of selected ones of said plurality of tube engagement flanges defining a tube receptacle through the lock washer for receiving a tube.

25 14. The lock washer of claim 13, wherein adjacent ones of said tube engagement flanges define a compression slot therebetween.

15 15. The lock washer of claim 13, further comprising a web extending between and adjoining adjacent ones of said tube engagement flanges.

10. (Amended) The lock washer of claim 4, wherein, upon flexion of said adjacent ones of said tube engagement flanges toward said ring, said web is configured to collapse upon itself.

16. The lock washer of claim 13, wherein each of said tube engagement flanges are proximally compressible with respect to said ring.

5 17. The lock washer of claim 17, wherein, upon applying a compressive load to said tube engagement flanges, said tube engagement flanges flex into said engaged state.

10 18. The lock washer of claim 17, wherein, upon compression of said tube engagement flanges, the inner diameter of said tube receptacle decreases.

15 19. The lock washer of claim 17, wherein, following the release of a compressive load, said tube engagement flanges flex into said relaxed state.

20 20. A catheter connector assembly comprising:  
a first member including a body which defines a first lumen therethrough;  
a second member having a first and second ends and including a body which defines a second lumen therethrough, said second member being interconnectable with said first member at said first end; and  
a lock washer disposed within one of said first and said second lumens, said lock washer including a ring and a plurality of compressible tube engagement flanges associated therewith extending centrally therefrom and defining a tube receptacle.

25 21. The catheter connector assembly of claim 20, wherein each of said tube engagement flanges includes a central tip, all of said central tips defining a tube receptacle through said lock washer upon compression of the lock washer.

22. The catheter connector assembly of claim 21, further comprising a cap interconnectable with the second end of said second member.

23. The catheter connector assembly of claim 22, wherein interconnection of said first member and said second member decreases the diameter of said tube receptacle.

5 24. The catheter connector assembly of claim 21, further comprising a tube positioned within said tube receptacle.